See attached form for additional information. Interagency Report Control No.:

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER:

93-R-0513

FORM APPROVED OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY** 

(TYPE OR PRINT)

Relypsa, Inc

Relypsa, Inc.

5301 Patrick Henry Drive Santa Clara, CA 950584

CUSTOMER NUMBER: 42329

Telephone: (408) -200-9507

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, or experimentation, or held for these purposes. Attach additional sheets if necessary)

(b)(2)High, (b)(7)(F)FACILITY LOCATION (Site) - See Aleshed Lis

REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY ( Attach additional sheets if necessary or use APHIS Form 7023A )						
A.  Animals Covered By The Animal Welfare Regulations	B. Number of animal being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not ye used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use or pain-relieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals an for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals upon which teaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for whithe use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, resor interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reast such drugs were not used must be attached to this report	TOTAL NUMBER OF ANIMALS  ( COLUMNS C + D + E )	
4. Dogs						
5. Cats						
6. Guinea Pigs					,	
7. Hamsters			102	38	140	
8. Rabbits						
9. Non-human Primates		· · · · · · · · · · · · · · · · · · ·				
10. Sheep						
11. Pigs						
12. Other Farm Animals						
13. Other Animals						

## ASSURANCE STATEMENTS

- Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anestetic, analgesic, and tranquilizing drugs, prior to, during, and following actual rese teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to painful procedures.
- This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and ap Institutional Animal Care and Use Committee (IACUC). A summary of all such exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary inc brief explanation of the exceptions, as well as the species and number of animals affected.
- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

	CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL (Chief Executive Officer or Legally Responsible Institutional Official)	OCT 2 7 2008
SIGNATURE OF (b)(6),(b)(7)(c)	(b)(6),(b)(7)(c)	DATE SIGNED
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## Column E Explanation

1. Registration Number: 93-R-0513

- 2. {Number} 38 animals were used in this type of study.
- 3. {Species (common name)} hamsters were used in this type study.
- 4. Explain the procedure producing pain and/or distress.

Hamsters are used as a model of <u>Clostrium difficile-associated diarrhea</u> (CDAD), which is a severe gastrointestinal disease in humans that may develop following antibiotic therapy. The potential for pain and/or distress results from the potential clinical signs of colitis and/or diarrhea that some animals (particularly untreated control animals) may experience after animals are treated with antibiotics and inoculated with <u>Clostridium difficile</u>.

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results.

The prevention and/or abatement of clinical signs associated with CDAD (such as lethargy, diarrhea, etc.) are what is used to determine the efficacy of novel therapeutics for this disorder. If a novel therapeutic is efficacious, then clinical signs either do not develop or are eliminated. If a novel therapeutic is NOT efficacious, then animals may develop clinical signs. Therefore, it is not possible to eliminate these clinical signs as they used to screen for efficacy. Anesthetics, analgesics and tranquilizing agents would not treat the cause of this disease and would compromise the validity of the studies since their use would confuse interpretation of the results/clinical signs.

Literature searches for alternatives that address reduction of animal numbers, refinement of research procedures/techniques and replacement were conducted. In addition, attendance at relevant scientific conferences and discussions with experts in the field were used to confirm that the model and methods were the most appropriate for these studies.